POSTERS

# Cardiovascular Surgery

## PP-043

### Preoperative Prophylactic use of Levosimendan in Patients with Severely Depressed Left Ventricle

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**Background:** The beneficial effects of the calcium sensitizer levosimendan have previously been demonstrated in patients undergoing coronary surgery (CABG) with left ventricular dysfunction however there are still questions regarding optimal dosing and timing of therapy. The goal of this study was to investigate the clinical outcomes of preoperative initiation of levosimendan in patients with left ventricular ejection fraction (LVEF) 30% or less during cardiac surgery.
**Methods:** Eighty one patients with an EF less than or equal 30% underwent CABG±other cardiac procedures in our center between 2005 and 2013. Myocardial viability was documented pre-operatively with thallium scintigraphy and/or PET scan. All patients received a 24 hour continuous levosimendan infusion of 0.1 mcg/kg/min starting 4 hours before the surgical procedure in the ICU. No loading dose was given. The infusion was prepared using 500 cc Dextrose and 12, 5 mg levosimendan and was administered through a central venous catheter.
**Results:** Forty six patients underwent concomitant surgery (56.8%). The 30-day mortality rate was 0%. In 5 patients (6.2%) IABP was used and in one patient (1.2%) ventricular assist device was inserted following surgery. The intubation time was 9.7±8.1 hours, intensive care unit stay 50.7±82.7 hours, total chest tube output 772±463 cc, red blood cell transfusion 1.7±4.4 units, postoperative atrial fibrillation 21.0%, renal failure requiring dialysis 0%, and hospital stay was 10.4±9.0 days.
**Discussion:** Preoperative, prophylactic levosimendan use is safe and seems to improve the outcomes of cardiac surgery in patients with severely depressed left ventricle function. Further randomized controlled studies are needed to show the benefit and cost effectivity of this drug.

## PP-044

### Long Term Results of Valve Sparing Aortic Root Replacement; A Single Center Experience

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**Objective:** The aim of this study is to investigate the early and midterm results of valve sparing aortic root replacements.
**Methods:** Between 1999 and 2013 a total of 7220 patients underwent cardiac operations, 26 of them (0.3%) were valve sparing aortic root replacements. The aortic pathology included either dissection or aneurysm formation. David operation was applied to all of these patients. Mean follow up period was 38±23 months. The results of early outcome and late follow up were reviewed.
**Results:** Mean age and Euroscore (%) of the patients were 54.1±10 and 6.4±1.4. Seven of the patients (26.9) were female. Mean preoperative left ventricular ejection fraction was 58.8±7.2 %. Sixteen patients (61.5%) had additional cardiac procedure (6 coronary bypass surgery, 3 hemiarcus replacement, 1 arcus aorta replacement, 5 mitral valve repair, 1 left atrial ablation). No operative and hospital mortality was observed. Mean cross clamp time and cardiopulmonary bypass time were 114±34 and 137±41 minutes, mean drainage was 720±450 ml, mean intubation time was 9.1±3.8 hours, mean intensive care unit stay time was 28.1±17.9 hours. During the intensive care unit stay 10 patient (38.5%) needed inotropic support. There was 3 (11.5%) intensive care unit readmission and one (%3.8) hospital readmission observed. During the late follow up there was no mortality and no need for reoperation or reintervention.
**Conclusions:** Our study shows valve sparing aortic root replacement is safe and feasible with low mortality and morbidity rates.

## PP-045

### Which is the Best Approach to Prevent Relapses after Drainage of Neoplastic Pericardial Effusion? A Multi Center Observational Study

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**Introduction:** Neoplastic pericarditis (NP) may cause cardiac tamponade requiring pericardiocentesis (PC), but pericardial effusion (PE) often relapse. Various treatments have been proposed di prevent relapse: pericardial window (PW), systemic chemotherapy (SCT), local chemo/radiotherapy (LT), combined systemic and local chemo/radiotherapy. No studies comparing the different approaches are available so far.
**Methods:** We used a semiquantitative scoring system including both PE and neoplastic masses, to assess the severity of pericardial disease at diagnosis and at the last available follow-up. In a multicenter observational study we collected 333 patients (pts) with NP. We reviewed the data about 264 patients (pts) (164 males) with NP (confirmed by cytology) treated by PC or PW and CT either systemic (SCT), local (LCT) or combined SCT+LCT. The tumors were 146 lung and 29 breast carcinomas, 21 lymphomas, 32 other tumors. The outcome was classified as: Complete response (CR) if no effusion or masses were detectable at follow-up; partial response (PR) if the neoplastic score was reduced, stable disease (SD) or progression (PD) if the score was unchanged or worsened.
**Results:** Pericardiocentesis plus LT (PC+LT) was used in 36 pts, plus SCT in 77, plus combined SCT+LT in 90; 63 pts had pericardial window plus SCT (PW+SCT). A complete or partial response was obtained in 226 pts (85%): 94% of those treated with PW+ SCT, 91% of those receiving SCT+ LCT, 85% of those treated with LT, and 73% of those receiving SCT ($p<0.001$). In the subgroup of lung cancer pts ($n=146$), the rate of CR or PR were: 96% with combined SCT+LT, 91% with PW+SCT, 88% with PC + LT, and 64% with PC+SCT ($p<0.001$). In the subgroup of lung cancer, moreover, the event-free survival of pts treated with combined LCT+ SCT was significantly longer than in each of other groups of treatment ($p<0.05$).
**Conclusions:** The most effective treatments of neoplastic pericarditis (mostly in lung cancer) are: pericardial drainage with combined local therapy and systemic CT and pericardial window associated to systemic CT. Using systemic CT only, after pericardiocentesis the recurrence rate is 27% in all tumors, and 36% in lung cancer patients.

## PP-046

### Is Carotid Artery Stent Procedure an Alternative to Carotid Endarterctomy with Regional Anesthesia Using Selective Shunt

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**Aim:** In this study, 82 patients who were treated with carotid endarterectomy and 39 patients who were treated with stent due to carotid artery stenosis in between 2001-2009 were evaluated retrospectively and compared.
**Patients and Methods:** Carotid artery stenting was performed by interventioanl radiology team in angiography suit. All the endarterectomy procedures were performed by the same cardiovascular sugery team. Operation times, mortality, morbidity, hospital stay times and cost analysis were calculated, recorded and compared between surgery and stent groups.
**Results:** The number of early complications in surgery patients was 4 patients with hemorraghia (4,9%) and 10 patients in stent group (25.6%) with hemiparesia, hemiplegia, hemorraghia and disphasia. Although there was no cerebrovascular event in surgery group, in stent group 10 patients had cerebrovascular event. ($P<0.001$). Mortality occurred in 2 and 5 patients in surgery (2.5%) and stent (12.5%) groups respectively. The mean intensive care unit stay time in surgery and stent groups were 1.24±1,77 and 2.5±1,76 and hospital stay time in surgery and stent groups were 1.75±0,88 and 3.79±4,0 respectively. In financial analysis total costs for surgery group was 2800 Turkish liras and in stent group 3756.41 Turkish liras ($P<0.001$).
**Conclusion:** Carotid endarterectomy with regional anesthesia is a safer and cheaper treatment modality with lower rates of mortality and morbidity when compared with carotid artery stenting. Big randomized series in future studies will give more detailed information about the feasibility of these two treatment modalities.